White Paper 4 May 2012

Subject: 01-2-3 Fence, Rio Grande Valley (RGV) Sector

Purpose: This paper serves to capture pertinent facts regarding the subject project and is intended to facilitate funding decisions to be made by OBP and BPFTI leadership with respect to future tactical infrastructure construction.

- 1. Performance Work Statement (PWS). The current alignment was originally determined somewhat theoretically in order to be able to conduct proper flood analyses along the Rio Grande. It is highly likely that this alignment must now be revised in order to take into account actual topography as well as real estate and/or environmental constraints. A new alignment will drive the performance work statement which in turn will drive estimates for project cost and schedule.
- 2. Real Estate (RE). This effort lies along the project's critical path and will be directly affected by the alignment chosen. Real Estate personnel must work closely with Office of Counsel to ensure the expeditious and economical acquisition and return of affected properties. Collaboration with DOJ attorneys will likely be necessary and will require additional funds to support. An estimate of 12 to 18 months has been provided for completion of all the necessary Real Estate transactions to support this effort. If the project is broken down into phases (i.e. O1 only), then it may be possible to reduce this timeline to 8 to 10 months for that particular portion of the work. This could allow for design and subsequent construction to be expedited and to proceed in a sequential fashion.



- 4. Design. Prior to finalizing the project alignment, a constructability analysis must be performed. This analysis will help ensure that the proposed alignment can accept the construction footprint. Amongst other things, it will help to determine the ability of the terrain to accept the proposed construction, to ensure sufficient setback from the river, and to identify any additional real estate required for construction. This aspect of the design will place a heavy emphasis upon geotechnical investigation and land surveying. The design will also incorporate any Government Furnished Materials (GFM) which may be made available for the project. Presently, the assumption is being made that no GFM are available. Similar to ongoing construction within RGV, the project will include gates along the alignment to allow for north-south mobility at select locations. Close coordination with IBWC will be essential for success throughout this process.
- 5. Risks. A more thorough capture and analysis of risk and possible mitigation efforts will be performed at a later date. For the purpose of this paper, it is sufficient to note that consideration must be given to cooperation (or lack of same) by landowners, support or non-support for the project by the local population, and access to sufficient amounts of steel and other key and/or long-lead items.

- 6. Acquisition Strategy. Current construction MATOCs awarded in 2008 are now expiring; the unrestricted MATOC for RGV will expire on 12 Oct 2012, so a different acquisition strategy will need to be developed and executed. At least two options are available with one being to make use of an existing USACE Southwest Division MATOC for horizontal construction. Capacity still exists on this MATOC and it features a list of unrestricted contractors from which to solicit bids. The other option is to employ a standard, open bid amongst unrestricted contractors nationwide. Either option will require approximately 90 days to award (following design).
- 7. Schedule. Given the uncertainties of the items discussed above (PWS, Real Estate, Design, and Risks) it is not possible to produce a definitive work schedule. However, it is reasonable to estimate that Real Estate will require 12 to 18 months to gain necessary access and permissions. Design will require an additional 6 months, and procurement (leading to award) an additional 3 months. If the overall project is broken down into phases, then these estimates may be able to be reduced to 8 to 12 months for Real Estate, 5 months for design, and 3 months for procurement.
- 8. Cost. Given the preliminary discussion in paragraphs 1 through 7, the following cost estimate is provided for consideration:
- a. Fence/mile -- 10 (5) This is derived based upon historical fence installation cost of approximately 10 (5) mile in the RGV area. However, this cost was with full GFM for steel so the 10 (6) mile cost represents an increase of approximately 40% above the full GFM historical cost (rounded up slightly to include cost of gates).
- b. RE/mile -- (b) (5) Condemnation (or "Possession Orders" for land already condemned) will need to occur and there is already a large backlog of PF225 and RGV Gates work in the local court systems. DOJ attorneys will likely assist in helping to gain required accesses.

The total estimated cost of (b) (5) mile means that the approximately mile alignment for O1-2-3 fence would cost approximately (b) (5) Conversely, for (b) (5) it would be possible to construct approximately (5) (7)(6) miles of fence.

9. Summary. The first priority is to confirm the alignment so that focused and cost-effective Real Estate efforts can begin. Once the decision regarding possible phasing is made and RE access is granted, design work can follow. Procurement and construction can begin as soon as OBP prioritization and funding are provided.